Work Order ID 111057

111057

January-08-14 12:52:58 PM

Item ID: D4092-041 **Accept** *N9000401 00* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Maintenance Step Assembly

Start Date: 1/08/14 **Start Qty:** 2.00 *2*

Required Date: 1/08/14 **Req'd Qty:** 2.00 *2*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** MLJ **Date:** 14-01-10 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr: D4092 / Revision Nbr: B									
100	Pick Kit	0.00				2x			DAS 36 9-89 14/05/15
100 Packaging	**Memo**	0.00							
Packaging									
110		0.00				2x			DAS 36 9-89 14/05/15
110 Small Fab	**Memo**	0.00							
Small Fab	Assemble as per Dwg Torque screws up to 15-25 in- lbs								
120	QC5- Inspect part completeness to step on W/O	0.00				2			Shp 14/5/15
120 QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other _____

Item ID: D4092-041 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Maintenance Step Assembly

Start Date: 1/08/14 **Start Qty:** 2.00 *2*
Required Date: 1/08/14 **Req'd Qty:** 2.00 *2*
Reference:

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location:_____	0.00							
130									
Packaging	**Memo**	0.00	PPP 119699.			2		14-5-16	DAS 26 9-89
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	**Memo**	0.00					14/5/20		
Quality Control									

MF
14-5-16

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

January-08-14 12:52:57 PM

Work Order ID: 111057

Parent Item: D4092-041

Parent Item Name: Maintenance Step Assembly

Start Date: 1/08/14 **Required Date:** 1/08/14

Start Qty: 2.00 **Required Qty:** 2.00

Comments: IPP REV:A NEW ISSUE 10-06-01 JLM VERIFIED BY:DD IPP REV:B AS PER ECN 11-639 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4092-1 Maintenance Step		Manufactured	No			100	Each	1.0000	2	4			
				Location		**Loc Qty**		**Loc Code**					
				ST270		1							
				108408		1							
D4093-1 Bracket		Manufactured	No			100	Each	5.0000	1	2			
				Location		**Loc Qty**		**Loc Code**					
				ST270		5							
				108292		5							
D4093-3 Bracket		Manufactured	No			100	Each	1.0000	1	2			
				Location		**Loc Qty**		**Loc Code**					
				ST270		1							
				109476		1							
D4093-5 Bracket		Manufactured	No			100	Each	4.0000	2	4			
				Location		**Loc Qty**		**Loc Code**					
				ST092		4							
				109411		4							
MS24694-S54 SCREW		Purchased	No			100	Each	338.0000	2	4			
				Location		**Loc Qty**		**Loc Code**					
				ST303		338							
				125535		338							

DQA: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Picklist Print

January-08-14 12:52:58 PM

Work Order ID: 111057
Parent Item: D4092-041
Parent Item Name: Maintenance Step Assembly

Start Date: 1/08/14 **Required Date:** 1/08/14
Start Qty: 2.00 **Required Qty:** 2.00

MS24694-S55 Screw	Purchased	No		100	Each	155.0000	8	16	DAS 36 9-89 14/05/15

Location		Loc Qty	Loc Code
ST303		155	
	m127305	55	
	m127327	100	

M128402 (16x)

MS24694-S56 SCREW	Purchased	No		100	Each	93.0000	2	4	DAS 36 9-89 14/05/15

Location		Loc Qty	Loc Code
ST303		93	
	m126400	93	

4

NAS1149D0332J Washer	Purchased	No		100	Each	2,018.0000	12	24	DAS 36 9-89 14/05/15

Location		Loc Qty	Loc Code
ST293		618	
	m127431	618	
ST294		10	
	m125807	10	
ST510a		1390	
	m127374	390	
	m127389	1000	

M128606 (24x)

MS21042L3 Nut	Purchased	No		100	Each	6,044.0000	12	24	DAS 36 9-89 14/05/15

Location		Loc Qty	Loc Code
ST506		962	
	123900	962	
ST509		5000	
	M127304	1000	
	M127410	3000	
	M127831	1000	
ST510a		82	
	M126333	82	

24

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

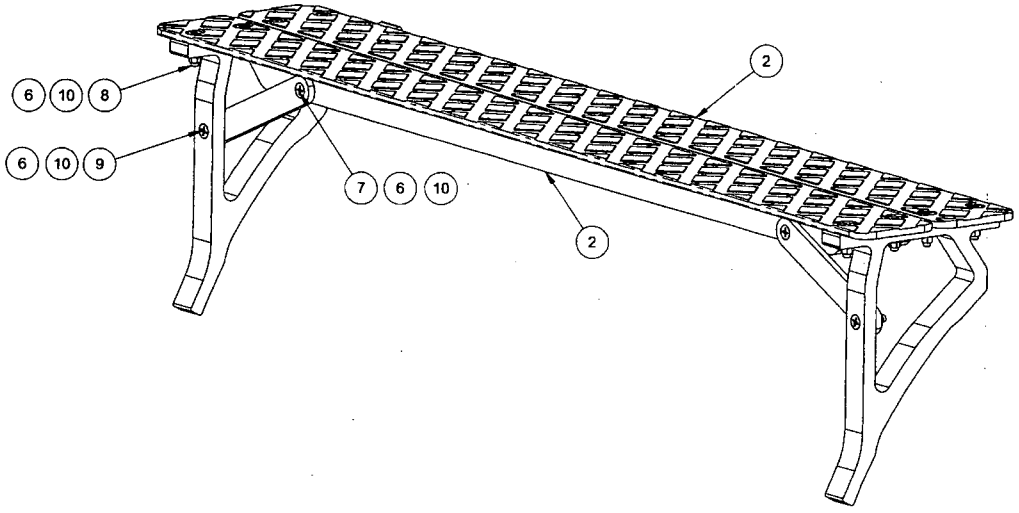
- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

111057
MCS
14-01-10

ITEM	QTY -041	PART NUMBER	DESCRIPTION
1	X	D4092-041	MAINTENANCE STEP ASSEMBLY
2	2	D4092-1	MAINTENANCE STEP
3	1	D4093-1	BRACKET
4	1	D4093-3	BRACKET
5	2	D4093-5	BRACE
6	12	MS21042L3	NUT
7	2	MS24694-S54	SCREW
8	8	MS24694-S55	SCREW
9	2	MS24694-S56	SCREW
10	12	NAS1149D0332J	WASHER



D4092-041 MAINTENANCE STEP ASSEMBLY B

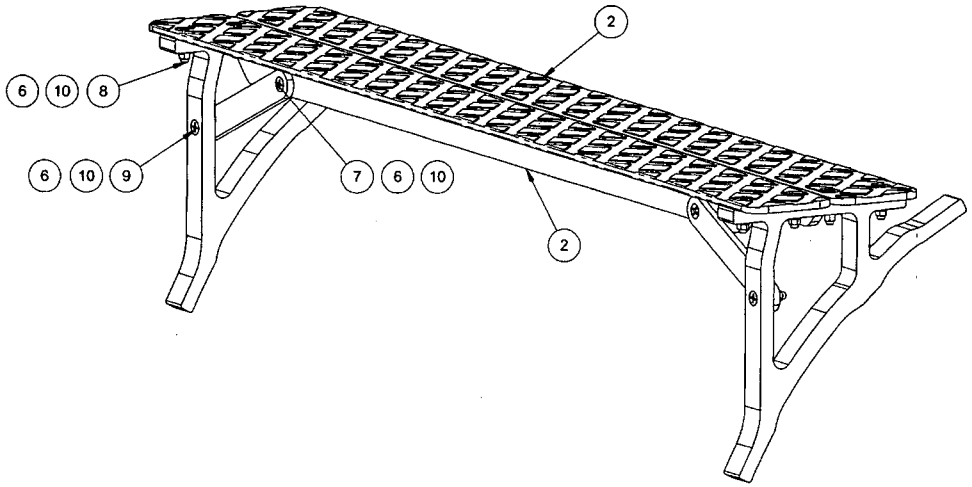
RELEASED
2011-09-22

REV.	DESCRIPTION	BY	DATE
B	REDRAWN; LOWERED FOR AESTHETICS	RF	11.07.27
A	NEW ISSUE	RF	10.09.16

DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA
DRAWN	RF	
CHECKED		DRAWING NO. D4092 REV. B
MFG. APPR.		SHEET 1 OF 6
APPROVED		TITLE MAINTENANCE STEP ASS'Y SCALE NTS
DE APPR.		
DATE	11.07.27	

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ITEM	QTY -042	P/N	DESCRIPTION
1	X	D4092-042	MAINTENANCE STEP ASSEMBLY
2	2	D4092-1	MAINTENANCE STEP
3	1	D4093-1	BRACKET
4	1	D4093-3	BRACKET
5	2	D4093-5	BRACKET
6	12	MS21042L3	NUT
7	2	MS24694-S54	SCREW
8	8	MS24694-S55	SCREW
9	2	MS24694-S56	SCREW
10	12	NAS1149D0332J	WASHER

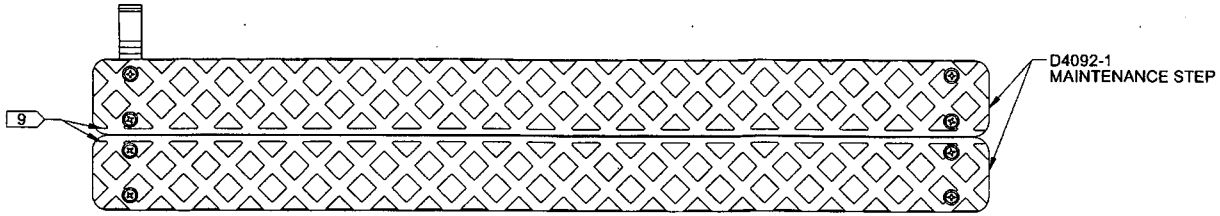


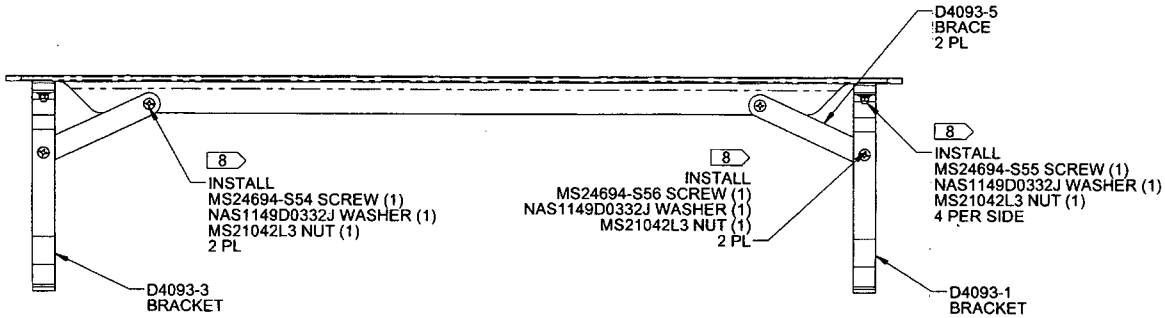
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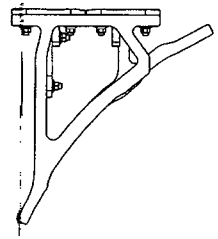
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2011-09-22

DESIGN	RF	**DART AEROSPACE USA, INC.** KENT, WA
DRAWN	RF	DRAWING NO. D4092 REV. B SHEET 2 OF 6
CHECKED		TITLE MAINTENANCE STEP ASS'Y SCALE NTS
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APPROVED		
DE APPR.		
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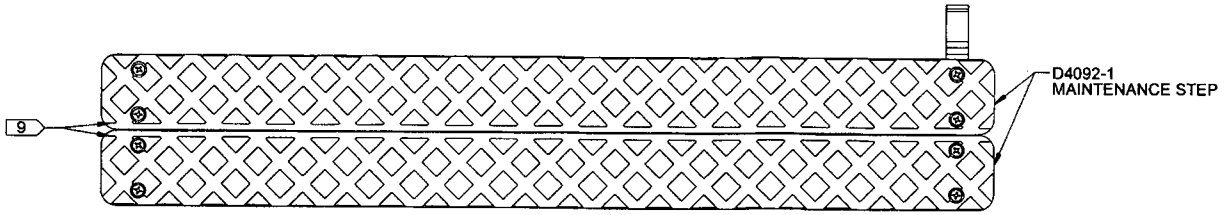
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2011-09-22

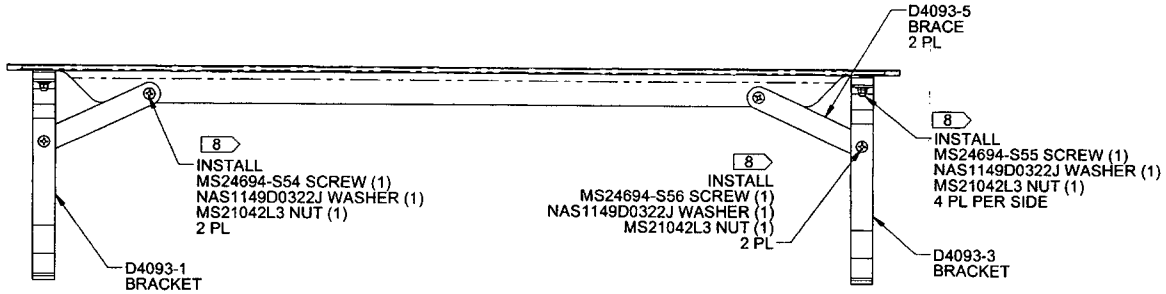
D4092-041 MAINTENANCE STEP ASSEMBLY

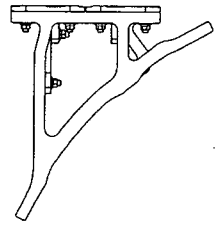
NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: PER QSI 044 6.1
7) WEIGHT: 5.37 lbs
8) TORQUE SCREWS UP TO 15-25 in-lb (1.7-2.8 N-m)
9) GRIP CUTOUT TOWARD CENTER

DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA
DRAWN	RF	DRAWING NO. D4092 REV. B
CHECKED		SHEET 3 OF 6
MFG. APPR.		TITLE MAINTENANCE STEP ASS'Y SCALE NTS
APPROVED		
DE APPR.		
DATE	11.07.27	

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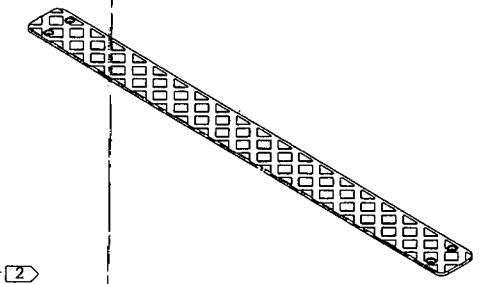
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2011-09-22

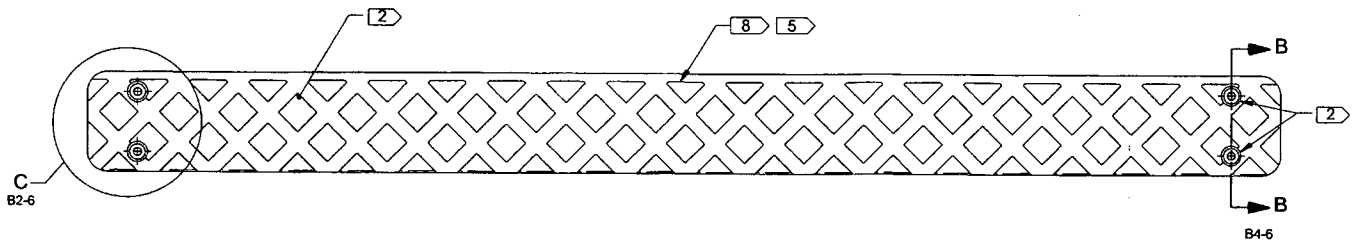
D4092-042 MAINTENANCE STEP ASSEMBLY

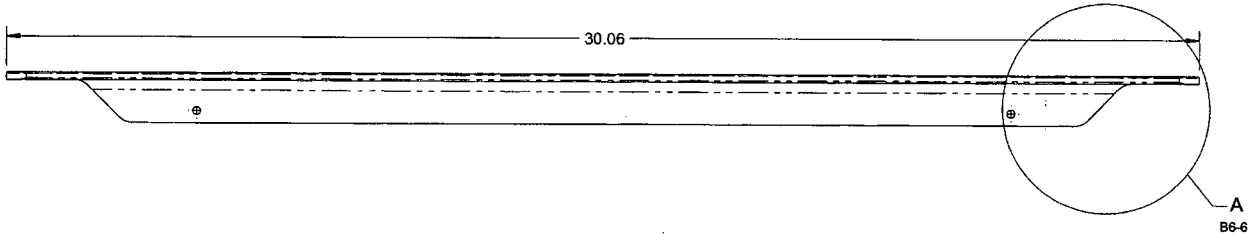
NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: PER QSI 044 6.1
7) WEIGHT: 5.37 lbs
8) TORQUE SCREWS UP TO 15-25 in-lb (1.7-2.8 N-m)
9) GRIP CUTOUT TOWARD CENTER

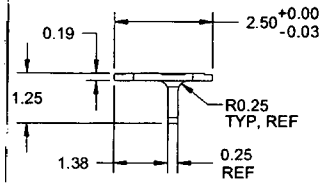
DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA
DRAWN	RF	
CHECKED		DRAWING NO. D4092 REV. B
MFG. APPR.		SHEET 4 OF 6
APPROVED		TITLE MAINTENANCE STEP ASS'Y SCALE NTS
DE APPR.		
DATE	11.07.27	

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D4092-1 MAINTENANCE STEP
(MAKE FROM D2761 EXTRUSION)

RELEASED
2011-09-22

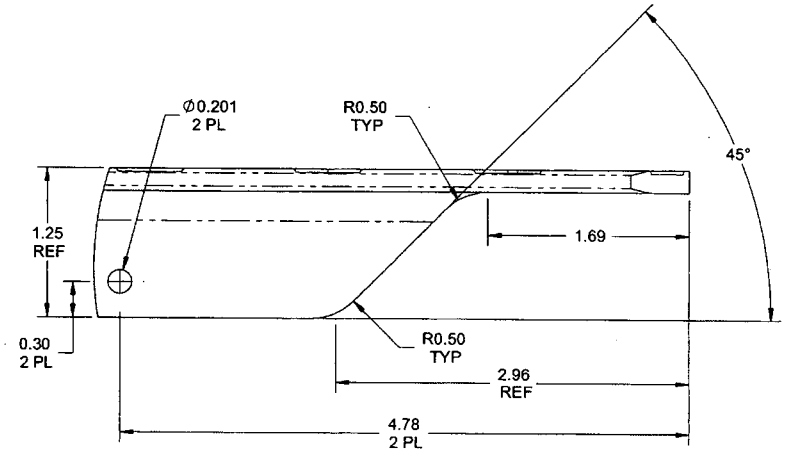
NOTES:
1) MATERIAL: MAKE FROM D2761 EXTRUSION
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
BLACK ANTI-SKID PAINT GRIP AREA AS INDICATED PER DART QSI 005 4.4
MASK RECTANGULAR CUTOUT PRIOR TO APPLICATION OF ANTI-SKID
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX, NOT REQUIRED TO DEBURR GRIP AREA
6) IDENTIFICATION: N/A
7) WEIGHT: 1.97 lbs
8) MACHINE 0.69 x 0.69 GRIP 0.030 DEEP AT 45 ° PATTERN 0.38 APART

DESIGN	RF
DRAWN	RF
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	11.07.27

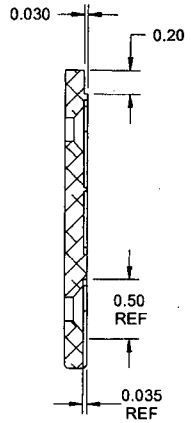
DART AEROSPACE USA, INC.
KENT, WA

DRAWING NO. D4092 REV. B
SHEET 5 OF 6
TITLE MAINTENANCE STEP ASS'Y SCALE NTS

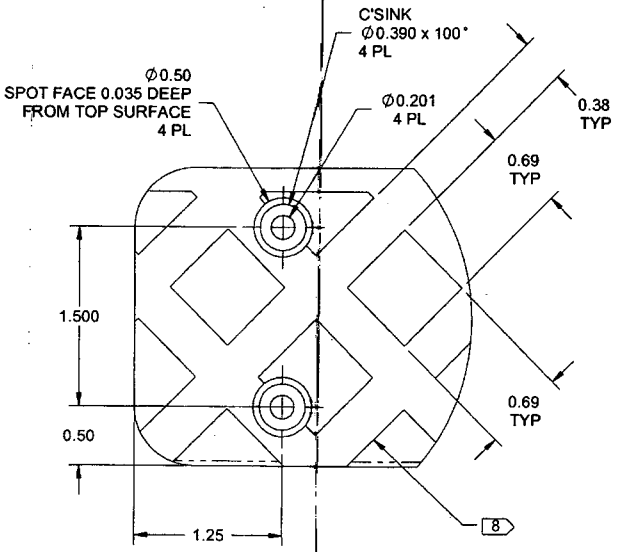
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DETAIL A B3-5
SCALE 3X, TYP



SECTION B-B C3-5
SCALE 3X, TYP



DETAIL C C8-5
SCALE 3X, TYP

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